What is claimed is:

[Claim 1] 1. A method for manufacturing a ternary nitride-based buffer layer of a nitride-based light-emitting device, comprising the steps of:

providing a substrate;

introducing a first reaction source comprising a first group □element into a chamber at a first temperature, the melting point of the first group Ⅲ element being lower than the first temperature, wherein the first group Ⅲ element is deposited on the substrate; and

introducing a second reaction source comprising a second group Ⅲ element and a third reaction source comprising a nitrogen element into the chamber at a second temperature for forming a ternary nitride-based buffer layer with the first group Ⅲ element on the substrate, wherein the second temperature is not lower than the melting point of the first group Ⅲ element.

[Claim 2] 2. The method of claim 1, wherein the substrate comprises at least a material selected from the group consisting of sapphire, GaN, AlN, SiC, GaAs, GaP, Si, ZnO, MgO, $MgAl_2O_4$, glass, and the like.

[Claim 3] 3. The method of claim 1, wherein the first temperature is 500℃ or above.

[Claim 4] 4. The method of claim 1, wherein the second temperature is 700℃ or above.

[Claim 5] 5. The method of claim 1, wherein the first group Ⅲ element comprises at least a material selected from the group consisting of Al, Ga, In, and the like.

[Claim 6] 6. The method of claim 1, wherein the second group Ⅲ element comprises at least a material selected from the group consisting of Al, Ga, In, and the like.

[Claim 7] 7. The method of claim 1, wherein the ternary nitride-based buffer layer thickness is between 1nm and 500nm.

[Claim 8] 8. The method of claim 1, wherein the ternary nitride-based buffer layer comprises at least a material selected from the group consisting of InGaN, AlGaN, InAlN, and the like.

[Claim 9] 9. A nitride-based light-emitting device comprising:

a substrate, a ternary nitride-based buffer layer formed over the substrate, a first conductivity type nitride-based semiconductor layer formed over the ternary nitride-based buffer layer, a light-emitting layer formed over the first conductivity type nitride-based semiconductor layer, and a second conductivity type nitride-based semiconductor layer formed over the light-emitting layer; wherein the ternary nitride-based buffer layer is formed by:

introducing a first reaction source comprising a first group Ⅲ element into a chamber at a first temperature, the melting point of the first group Ⅲ element being lower than the first temperature, wherein the first group Ⅲ element is deposited on the substrate;

introducing a second reaction source comprising a second group □element and a third reaction source comprising a nitrogen element into the chamber at a second temperature for forming a ternary nitride-based buffer layer with the first group Ⅲ element on the substrate, wherein the second temperature is not lower than the melting point of the first group Ⅲ element.

[Claim 10] 10. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the substrate comprises at least a material selected from the group consisting of sapphire, GaN, AlN, SiC, GaAs, GaP, Si, ZnO, MgO, $MgAl_2O_4$, glass, and the like.

[Claim 11] 11. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the first conductive nitride-based semiconductor layer comprises at least a material selected from the group consisting of AlN, GaN, AlGaN, InGaN, AlInGaN, and the like.

[Claim 12] 12. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the light-emitting layer comprises at least a material selected from the group consisting of AlN, GaN, AlGaN, InGaN, AlInGaN, and the like.

[Claim 13] 13. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9,wherein the second conductive nitride-based semiconductor layer comprises at least a material selected from the group consisting of AlN, GaN, AlGaN, InGaN, AlInGaN, and the like.

[Claim 14] 14. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the first temperature is 500℃ or above.

[Claim 15] 15. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the second temperature is 700℃ or above.

[Claim 16] 16. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the first group Ⅲ element comprises at least a material selected from the group consisting of Al, Ga, In, and the like.

[Claim 17] 17. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the second group Ⅲ element

comprises at least a material selected from the group consisting of Al, Ga, and In, and the like.

[Claim 18] 18. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the ternary nitride-based buffer layer thickness is between 1nm and 500nm.

[Claim 19] 19. The ternary nitride-based buffer layer of a nitride-based light-emitting device of claim 9, wherein the ternary nitride-based buffer layer comprises at least a material selected from the group consisting of InGaN, AlGaN InAlN, and the like.